



Naval Education and
Training Command

NAVEDTRA 82104-A
July 1996
0503-LP-482-1400

Nonresident Training
Course (NRTC)

Signalman 1 & C

Only one answer sheet is included in the NRTC. Reproduce the required number of sheets you need or get answer sheets from your ESO or designated officer.

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Although the words “he,” “him,” and “his” are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading this material.

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ERRATA #3
Stock Ordering No.
0503-LP-482-1403

Specific Instructions and Errata for
Nonresident Training Course

SIGNALMAN 1 & C, NAVEDTRA 82104-A

1. No attempt has been made to issue corrections for errors in typing, punctuation, etc.
2. To receive credit for deleted questions, show this errata to your local course administrator (ESO/scorer). The local course administrator is directed to correct the course and the answer key by indicating the question(s) deleted.
3. Assignment booklet, SIGNALMAN 1 & C, NAVEDTRA 82104-A.
Make the following changes:
 - a. Page 1, Textbook Assignment, CHANGE chapters "1 through 4, pages 1-1 through 4-46" to "2 through 4, pages 2-1 through 4-7."
 - b. Page 7, Textbook Assignment, CHANGE pages "4-30 through 7-20" to pages "4-7 through 7-6."
 - c. Page 13, Textbook Assignment, CHANGE pages "7-21 through 9-50" to pages "7-7 through 9-32."
 - d. Page 19, Textbook Assignment, CHANGE page "13-6" to "14-4."
 - e. Page 21, right hand column, text above question 4-35, CHANGE "4-50" to "4-47."
 - f. CHANGE "ACP 129" to "ACP 130" in the following items:

2-12	2-16	3-2	3-6
3-14	3-17	4-62	
 - NOTE: "ACP 129" and "ACP 168" have been combined and are now published as "ACP 130."
 - g. Items 2-16 and 4-68 CHANGE "NWP 4" to "NWP 6-01".
 - h. Item 4-35, CHANGE "NWP 22-3" to "NWP 3-02.1."
3. Delete the following questions:

1-45	1-59	1-71	1-73	4-72
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0503-LP-482-1403

SIGNALMAN 1 & C

NAVEDTRA 82104-A

Prepared by the Naval Education and Training Program Management
Support Activity (NETPMSA), Pensacola, Florida

Congratulations! By enrolling in this course, you have demonstrated a desire to improve yourself and the Navy. Remember, however, this self-study course is only one part of the total Navy training program. Practical experience, schools, selected reading, and your desire to succeed are also necessary to successfully round out a fully meaningful training program. You have taken an important step in self-improvement. Keep up the good work.

HOW TO COMPLETE THIS COURSE SUCCESSFULLY

ERRATA: If an errata comes with this course, make all indicated changes or corrections before you start any assignment. Do not change or correct the associated text or assignments in any other way.

TEXTBOOK ASSIGNMENTS: The text for this course is *Signalman*, NAVEDTRA 12104-A. The text pages that you are to study are listed at the beginning of each assignment. Study these pages carefully before attempting to answer the questions in the course. Pay close attention to tables and illustrations because they contain information that will help you understand the text. Read the learning objectives provided at the beginning of each chapter or topic in the text and/or preceding each set of questions in the course. Learning objectives state what you should be able to do after studying the material. Answering the questions correctly helps you accomplish the objectives.

SELECTING YOUR ANSWERS: After studying the associated text, you should be ready to answer the questions in the assignment. Read each question carefully, then select the BEST answer. Be sure to select your answer from the subject matter in the text. You may refer freely to the text and seek advice and information from others on problems that may arise in the course. However, the answers must be the result of your own work and decisions. You are prohibited from referring to or copying the

answers of others and from giving answers to anyone else taking the same course. Failure to follow these rules can result in suspension from the course and disciplinary action.

ANSWER SHEETS: You must use answer sheets designed for this course (NETPMSA Form 1430/5, Stock Ordering Number 0502-LP-216-0100). Use the answer sheets provided by Educational Services Officer (ESO), or you may reproduce the one in the back of this course booklet.

SUBMITTING COMPLETED ANSWER SHEETS: As a minimum, you should complete at least one assignment per month. Failure to meet this requirement could result in disenrollment from the course. As you complete each assignment, submit the completed answer sheet to your ESO for grading. You may submit more than one answer sheet at a time.

GRADING: Your ESO will grade each answer sheet and notify you of any incorrect answers. The passing score for each assignment is 3.2. If you receive less than 3.2 on any assignment, your ESO will list the questions you answered incorrectly and give you an answer sheet marked "RESUBMIT." You must redo the assignment and complete the RESUBMIT answer sheet. The maximum score you can receive for a resubmitted assignment is 3.2.

COURSE COMPLETION: After you have submitted all the answer sheets and have earned at least 3.2 on each assignment, your command should

give you credit for this course by making the appropriate entry in your service record.

NAVAL RESERVE RETIREMENT CREDIT: If you are a member of the Naval Reserve, you will receive retirement points if you are authorized to receive them under current directives governing retirement of Naval Reserve personnel. For Naval Reserve retirement, this course is evaluated at 6 points. (Refer to BUPERSINST 1001.39 for more information about retirement points.)

STUDENT QUESTIONS: If you have questions concerning the administration of this course, consult your ESO. If you have questions on course content, you may contact NETPMSA at:

DSN: 922-1815

Commercial: (904) 452-1815

FAX: 922-1819

INTERNET:

NETPMSA.N312@NETPMSA.CNET.NAVY.MIL

COURSE OBJECTIVES: In completing this nonresident training course, you will demonstrate a knowledge of the subject matter by correctly answering questions on the following subjects: visual communications; signaling equipment; allied communications; honors and ceremonies; convoy communications; allied flaghoist procedures; international signaling; aircraft and ship identification; security and watchstanding duties.

Naval courses may include several types of questions--multiple-choice, true-false, matching, etc. The questions are not grouped by type but by subject matter. They are presented in the same general sequence as the textbook material upon which they are based. This presentation is designed to preserve continuity of thought, permitting step-by-step development of ideas. Not all courses use all of the types of questions available. You can readily identify the type of each question, and the action required, by reviewing of the samples given below.

MULTIPLE-CHOICE QUESTIONS

Each question contains several alternative answers, one of which is the best answer to the question. Select the best alternative, and blacken the appropriate box on the answer sheet.

SAMPLE

- s-1. The first U.S. Navy nuclear-powered vessel was what type of ship?

1. Carrier
2. Submarine
3. Destroyer
4. Cruiser

Indicate in this way on your answer sheet:

	1	2	3	4
	T	F		
s-1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _ _ _

TRUE-FALSE QUESTIONS

Mark each statement true or false as indicated below. If any part of the statement is false, the entire statement is false. Make your decision, and blacken the appropriate box on the answer sheet.

SAMPLE

- s-2. Shock will never be serious enough to cause death.

1. True
2. False

Indicate in this way on your answer sheet:

	1	2	3	4
	T	F		
s-2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _ _ _

MATCHING QUESTIONS

Each set of questions consists of two columns, each listing words, phrases or sentences. Your task is to select the item in column B which is the best match for the item in column A. Items in column B may be used once, more than once, or not at all. Specific instructions are given with each set of questions. Select the numbers identifying the answers and blacken the appropriate boxes on your answer sheet.

SAMPLE

In answering questions s-3 through s-6, SELECT from column B the department where the shipboard officer in column A functions. Responses may be used once, more than once, or not at all.

A. OFFICER

B. DEPARTMENT

- | | |
|-------------------------------|---------------------------|
| s-3. Damage Control Assistant | 1. Operations Department |
| s-4. CIC Officer | 2. Engineering Department |
| s-5. Disbursing Officer | 3. Supply Department |
| s-6. Communications Officer | 4. Navigation Department |

Indicate in this way on your answer sheet:

	1	2	3	4
	T	F		
s-3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _ _ _
s-4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _ _ _
s-5	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> _ _ _
s-6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> _ _ _

ASSIGNMENT 1

Textbook Assignment: "Signal Equipment," "Messages," and "Allied Communications Procedures," chapters 1 through 4, pages 1-1 through 4-46.

-
- | | | | |
|------|--|-------|--|
| 1-1. | The lamp-supporting yoke of the 12-inch incandescent searchlight is designed for what purpose? <ol style="list-style-type: none">1. To allow the light to be swung in an arc2. To hold the light in place3. To control the up and down movement of the light4. To elevate the light | 1-6. | The increase in the light intensity of the 12-inch mercury-xenon greatly increases which of the following conditions? <ol style="list-style-type: none">1. Glare2. Range3. Voltage4. Radiation |
| 1-2. | Adjustment of the 12-inch incandescent searchlight so it can be elevated or depressed is the function of what device? <ol style="list-style-type: none">1. Lamp-supporting yoke2. Signaling shutters3. Trunnion bearings4. Hinge arrangement | 1-7. | Because the life of the mercury-xenon lamp is reduced considerably at extreme angles, the light should NOT be depressed or elevated more than how many degrees for extended periods of time? <ol style="list-style-type: none">1. 5°2. 10°3. 20°4. 30° |
| 1-3. | When not in use, the 12-inch incandescent searchlight should be locked in what position? <ol style="list-style-type: none">1. Face up2. Face down3. Inboard4. Fore and aft | 1-8. | Initially, the lamp of the mercury-xenon burns about what percent of its designed intensity? <ol style="list-style-type: none">1. 15°2. 20°3. 25°4. 30° |
| 1-4. | For what reason should you operate the 12-inch incandescent searchlight a few minutes after lubrication with the glass door open and the cover removed? <ol style="list-style-type: none">1. To reduce clouding of the reflector2. To allow the lubricant to evaporate3. To make sure the searchlight is working properly4. To reduce the chance of the searchlight exploding | 1-9. | To become qualified to perform electrical maintenance on a searchlight, a member of the signal gang must be qualified by what individual? <ol style="list-style-type: none">1. Communication officer2. Executive officer3. An Electrician's Mate4. Engineer officer |
| 1-5. | What step should you perform to take up the wear in the leather bumpers of the 12-inch incandescent searchlight? <ol style="list-style-type: none">1. Adjust the shutter stop screws at regular intervals2. Replace them as soon as the wear appears3. Keep the shutters open4. Keep the shutters closed | 1-10. | What problem is corrected by centering the transverse plate of the 12-inch mercury-xenon searchlight? <ol style="list-style-type: none">1. Centering of the light beam2. Focusing of the light beam3. Elevation of the locking pin4. Elevation of the vertical beam |
| | | 1-11. | What is the effective range, in yards, of the multipurpose light? <ol style="list-style-type: none">1. 1,0002. 2,0003. 3,0004. 4,000 |

- 1-12. The multipurpose light is designed to send a total of how many words per minute?
1. 8
 2. 10
 3. 12
 4. 15
- 1-13. Yardarm blinkers are what point white lights?
1. 10
 2. 20
 3. 30
 4. 32
- 1-14. The AN/SAT-2 beacons are designed so they can NOT be detected by the unaided eye at a distance of over how many yards?
1. 100
 2. 200
 3. 300
 4. 400
- 1-15. The AN/KAS-1 provides U.S. Navy ships with the capability for detecting and identifying chemical warfare agents.
1. True
 2. False
- 1-16. How many mounting locations should your ship establish for the AN/KAS-1?
1. One
 2. Two
 3. Three
 4. Four
- 1-17. What maintenance consists of the removal and replacement of the sensor/pivot unit of the AN/KAS-1?
1. Preventive
 2. Corrective
 3. Lay-up
 4. Start-up
- 1-18. What is the eyepiece magnification power of the ship's binoculars?
1. 12
 2. 16
 3. 18
 4. 20
- 1-19. What is the purpose of the ship's binocular's inlet and outlet valves?
1. To increase density
 2. To elevate
 3. To evacuate and recharge the binocular's assembly with dry nitrogen
 4. To enable the diopter to be increased in increments
- 1-20. What is the most commonly used optical equipment?
1. The ship's binoculars
 2. The OOD's spyglass
 3. The long glass
 4. The 7X50 binoculars
- 1-21. What is the first step in focusing a pair of 7X50 binoculars?
1. Set the left eyepiece on zero and the right eyepiece on +4
 2. Set both eyepieces on zero
 3. Set both eyepieces on +1
 4. Set both eyepieces on +4
- 1-22. The optics used in night vision devices are of what type?
1. Magnetic
 2. Electronic
 3. Prismatic
 4. Fluorescent
- 1-23. What is the basic difference between the Mod 1 and Mod 3 night vision sights
1. The lens
 2. The mount
 3. The eyepiece
 4. The image intensification tube
- 1-24. The lowest price bunting used to make flags is made of what material?
1. Wool
 2. Rayon
 3. Nylon
 4. Cotton
- 1-25. When making flags with complicated designs, what material should you use?
1. Rayon
 2. Wool
 3. Nylon
 4. Cotton

- 1-26. What weather condition causes the quickest deterioration of flags and pennants?
1. Dry and calm
 2. Dry and windy
 3. Moist and calm
 4. Moist and windy
- 1-27. What is the correct procedure for reeving halyards through a signal halyard block?
1. Forward to aft
 2. Aft to forward
 3. Inboard to outboard
 4. Outboard to inboard
- 1-28. What type of line is required by the Board of Inspection and Survey for signal halyards aboard ship?
1. Double-braided 1/8-inch cotton rope
 2. Double-braided 2-inch cotton rope
 3. Double-braided 1 1/8-inch nylon rope
 4. Double-braided 2-inch nylon rope
- 1-29. What special tools do you need to splice line 3 inches or smaller?
1. Wire fid
 2. Fid and pusher
 3. Core extractor
 4. Pencil
- 1-30. Prior to whipping, what should you do to prevent a no-load opening?
1. Make an eye splice
 2. Stitch-lock the splice
 3. Milk the core
 4. Flex and loosen the crossover
- 1-31. What strand should you always tuck first when you are making an eye splice?
1. Left
 2. Right
 3. Middle
 4. End
- 1-32. How many tucks are required of line made of synthetic fiber when you are splicing?
1. 1 or 2
 2. 2 or 3
 3. 3 or 4
 4. 4 or 5
- 1-33. What publication contains general precautions and instructions for going aloft?
1. OPNAVINST 3120.32
 2. OPNAVINST 4790.4
 3. OPNAVINST 5100.19
 4. OPNAVINST 5510.1
- 1-34. Electrician's Mates are generally responsible for the periodic changes and routine maintenance for all signal equipment.
1. True
 2. False
- 1-35. A message that contains the name of signal flags in its text is regarded as a signal.
1. True
 2. False
- 1-36. What type of message is sent if the originator believes it is necessary for each addressee to know the other addressees?
1. Single-address message
 2. Multiple-address message
 3. A book message
 4. A general message
- 1-37. What type of message has a wide standard distribution?
1. A single-address message
 2. A multiple-address message
 3. A book message
 4. A general message
- 1-38. All messages of a given general message title are numbered in what way?
1. By date-time group
 2. Serially
 3. Consecutively
 4. Letter-number combinations
- 1-39. To inform another ship to reduce brilliancy, what prosign should you send?
1. B
 2. D
 3. F
 4. W

- 1-40. What does an overscore over a prosign indicate?
1. The prosign is to be sent as separate characters
 2. The prosign can only be used in directional flashing light
 3. The prosign can only be used in semaphore
 4. The prosign is to be sent as one character
- 1-41. What part of a visual message provides communication personnel with the information for transmitting the message?
1. Heading
 2. Text
 3. Ending
 4. Ending sign
- 1-42. In what three forms may a message be prepared for transmission?
1. Plaindress, codress, address
 2. Plaindress, abbreviated plaindress, codress
 3. Codress, abbreviated codress, address
 4. Plaindress, codress, full dress
- 1-43. In the procedure component of a visual message, what item contains instructions on relaying?
1. Call
 2. Transmission identification
 3. Transmission instructions
 4. Message instructions
- 1-44. What is the purpose of a precedence assigned to a message?
1. To assure rapid handling of the message
 2. To state the relevance of the message contents
 3. To state the need for a reply
 4. To state the need to relay the message
- IN ANSWERING QUESTION 1-45, REFER TO FIGURE 3-2 IN THE TEXT, PLAINDRESS VISUAL MESSAGE.
- 1-45. Referring to figure 3-2, in the training manual, the latter precedence of the message is addressed to what call sign?
1. XGHL
 2. OHWZ
 3. NFZV
 4. NQHS
- 1-46. How many prosigns can you include in the address component of a visual message?
1. One
 2. Two
 3. Three
 4. Four
- 1-47. If a collective call is used in a visual message, the prosign XMT must also appear in the transmission instructions.
1. True
 2. False
- 1-48. What system is used in counting groups of a naval message when that message is transmitted over commercial circuits?
1. Group count
 2. Groups not counted
 3. Accounting symbols
 4. Commercial symbols
- 1-49. What is the textual format of a naval message designed to accomplish?
1. Readability and conciseness
 2. Shortness and cogency
 3. Succinctness and summarization
 4. Terseness and authority
- 1-50. What is the highest classification authorized for transmission of a visual message?
1. Unclassified
 2. Confidential
 3. Secret
 4. Top Secret
- 1-51. What type of message contains only prosigns, operating signals, and amplifying data necessary to convey its meaning?
1. Plaindress message
 2. Abbreviated plaindress message
 3. Service message
 4. Abbreviated service message
- 1-52. What type of message heading contains only information necessary to enable communications personnel to handle it properly?
1. Plaindress message
 2. Abbreviated plaindress message
 3. Abbreviated service message
 4. Codress message

- 1-53. What is the definition of letters, letter-number combinations, or one or more pronounceable words used for establishing and maintaining communication?
1. Special operating groups
 2. Address indicating groups
 3. Call signs
 4. Plain language stations and address designator
- 1-54. Which of the following call signs represents no facility, command, authority, or unit?
1. International call sign
 2. Voice call sign
 3. Net call sign
 4. Indefinite call sign
- 1-55. A visual call sign in conjunction with a signal has what meaning?
1. To address the ship
 2. To complete, amplify, or vary the meaning of the signal
 3. To denote or indicate the ship
 4. To determine the ship
- 1-56. Visual call signs can be used in the transmission instructions of a message to be relayed by other than visual means.
1. True
 2. False
- 1-57. All ships of cruiser group 5 are present in port. You are Signaller aboard the flagship. You are given a message for all ships and unit commanders in the group. What visual call sign should you instruct your signal gang to hoist?
1. GROUP/FLOT p5
 2. GROUP/FLOT Cp5
 3. Cp5 GROUP/FLOT
 4. C GROUP/FLOT p5
- 1-58. What call sign should you hoist to call task force 36 when transmitting an intra-USN message by flashing light?
1. 6p36
 2. 636
 3. SIX p3p6
 4. SIX THREE SIX
- 1-59. While at anchor, the OOD orders you to hoist the recall signal for the captain's gig. What signal should you hoist?
1. Qp1
 2. Qp2
 3. Qp3
 4. Qp4
- 1-60. What type of address group is a representative of a single command or unit ashore or afloat?
1. Geographical
 2. Collective
 3. Indefinite
 4. Individual
- 1-61. What is the main purpose of address indicating groups?
1. To increase security
 2. To increase the speed of traffic handling and to reduce the length of address components
 3. To eliminate message headings
 4. To notify addressees of incoming messages and the time required to deliver these messages
- 1-62. Your Signaller of the watch just received an incoming tactical signal. To what stations on board ship should he/she convey this message?
1. OOD only
 2. CIC only
 3. CIC and OOD
 4. CIC and communication center
- 1-63. Of the following shipboard communication factors, which one has no bearing on the method of communications chosen?
1. The need for accuracy
 2. The need for security
 3. The speed of transmission
 4. The time of transmission
- 1-64. What communication element provides a brevity code for the passing of information pertaining to communications, aircraft operations, and search and rescue?
1. Prosigs
 2. Operating signals
 3. Unit indicators
 4. Transmission instructions

- 1-65. In visual communications, when is relaying automatic?
1. The call sign is a collective call
 2. The call sign is a indefinite call
 3. The call sign is a tactical call
 4. The call sign is a voice call
- 1-66. When a maneuver alters the position of a ship, the responsibility for relaying signals does not alter until completion of the maneuver.
1. True
 2. False
- 1-67. Call signs and address groups in message headings should be arranged in what order?
1. Alphabetical
 2. Serial
 3. Seniority
 4. In the order to which you will transmit the message
- 1-68. You receive a routine message from the OOD. The message is address to all ships in visual range. What form of flashing light should you use to send this message?
1. DSL
 2. Directional
 3. Non-directional
 4. Infrared
- 1-69. What signal should you send to receipt for a non-directional flashing light message?
1. RRRR
 2. RRR
 3. RR
 4. R
- 1-70. You receive a message by the use of the daylight signaling lantern. After checking the message you are ready to receipt for the message. How should you receipt for the signal?
1. By hauling down DESIG
 2. By sending R by flashing light
 3. By sending R by daylight signaling lantern
 4. By sending R by semaphore
- 1-71. You want to send a flashing light message to a ship well within visual range. Rather than using a full call, you raise the ship by means of its abbreviated call. What does the abbreviated call involve?
1. Abbreviating the call sign of the ship being call
 2. Abbreviating your ship's call sign
 3. Omitting the call of the ship being called
 4. Omitting your ship's call sign
- 1-72. You are steaming in formation aboard the flagship. You receive a message where an abbreviated call is used. To what officer is the message addressed?
1. The commanding officer
 2. The officer of the deck
 3. The flag officer
 4. The communications officer
- 1-73. Your are in company with several ships. What signal should you send to indicate to the calling ship that your ship is answering her call?
1. Your call sign, preceded by K
 2. Your call sign, followed by K
 3. Your call sign, followed by the calling ship's call sign
 4. The calling ship's call sign, followed by your call sign
- 1-74. You are aboard Rp9, you have a message for three ships in formation. Because of your location, you can only visually send the message to Cpl. Which of the following headings should you use to have Cpl transmit the message to Ap5 and Dp6?
1. Cpl DE Rp9 T R 271555Z MAR 96 FM Rp9 TO Ap5 Cpl Dp6
 2. Cpl DE Rp9 R 271555Z MAR 96 FM Rp9 TO Ap5 Cpl Dp6 T Ap5 Dp6
 3. Cpl DE Rp9 R T 271555Z MAR 96 FM Rp9 TO Ap5 Cpl Dp6
 4. Cpl DE Rp9 T R 271555Z MAR 96 FM Rp9 TO T Ap5 Cpl Dp6
- 1-75. You have to send an abbreviated service message to obtain a repetition from a message that has a priority precedence. What, if anything, should be the precedence of your abbreviated service message?
1. Routine
 2. Priority
 3. Immediate
 4. Nothing